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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* BALA RAMACHANDRAN and ARAVIND LOKE

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Appeal 2009-013414  
Application 10/696,626  
Technology Center 2600

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Before ALLEN R. MacDONALD, ROBERT E. NAPPI,  
and ERIC S. FRAHM, *Administrative Patent Judges*.

FRAHM, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

### *Introduction*

Appellants appeal under 35 U.S.C. § 134 from rejections of claims 1-33. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

### *Exemplary Claim*

Exemplary independent claim 1 under appeal, with emphasis added, reads as follows:

1. A method for receiving signals based on a plurality of systems, the method comprising:

converting a first signal based on a first system to a first baseband signal;

converting a second signal based on a second system to a second baseband signal;

processing the first baseband signal using baseband components; and

processing the second baseband signal using the baseband components, wherein processing the first baseband signal and the second baseband signal comprises selectively filtering and selectively DC-offset correcting the first and second baseband signals, *wherein selectively filtering and selectively DC-offset correcting comprises selecting different filtering bandwidths and different DC-offset correcting bandwidths based on which system baseband signal is to be processed.*

*The Rejections*

1. The Examiner rejected claims 1-27 as being unpatentable under 35 U.S.C. § 103(a) over the combination of Yan (US 6,816,718 B2) and Isberg (US 6,029,052).

2. The Examiner rejected claims 28-33 as being unpatentable under 35 U.S.C. § 103(a) over the combination of Peterzell (US 6,694,129 B2), *DVB – Digital Video Broadcasting – History of the DVB Project*, DVB, pp. 1-6 (2003), from internet website address [http://www.dvb.org/about\\_dvb/history/](http://www.dvb.org/about_dvb/history/) (hereinafter, “DVB.org”), and *IEEE Std 802.11a-1999*, IEEE, pp. 3-7 (1999) (hereinafter, “IEEE 802.11a Std”).

3. The Examiner rejected claims 28-33 as being unpatentable under 35 U.S.C. § 103(a) over the combination of Yan, DVB.org, and IEEE 802.11a Std.

*Appellants’ Contentions*

1. Appellants contend that the Examiner erred in rejecting claims 1-27 under 35 U.S.C. § 103(a) over the combination of Yan and Isberg (*see supra* first rejection) for numerous reasons, including: (1) Yan fails to teach, disclose, or suggest that the common level to which the DC offset corrector forces the signals has any relationship to the system baseband signal as set forth in claim 1, and instead the common level is determined relative to in-phase and quadrature components; (2) Yan’s forcing of signals to a common level is not the same as selection of different DC-offset correcting bandwidths based on which system baseband signal is processed as set forth in claim 1; (3) Yan fails to teach that different DC-offset correcting bandwidths are selected as set forth in claim 1; (4) Isberg fails to cure the

deficiencies of Yan with regard to claim 1; (5) Yan's DC-offset elements are not bandwidth-switchable as recited in claim 11; (6) Yan fails to disclose, teach, or suggest selecting different DC-offset correction bandwidths based on which system baseband signal is processed as set forth in claim 21; and (7) Yan selects resistance and not bandwidths as recited in claim 21 (App. Br. 13-16; Reply Br. 2-4).

2. Appellants contend that the Examiner erred in rejecting claims 28-33 under 35 U.S.C. § 103(a) over the combination of Peterzell, DVB.org, and IEEE 802.11a Std (*see supra* second rejection) for numerous reasons, including: (1) Peterzell fails to teach or suggest the limitation of "a direct current (DC)-correction element configured to include switchable bandwidths," as recited in claim 28; (2) Peterzell fails to go into any detail about the bandwidth of the DC correction element; (3) the only switchable aspect of Peterzell's DC cancellation module appears to be speed as described at column 13, lines 59-61; and (4) a DC offset is direct current which has zero bandwidth (i.e., the Examiner's interpretation of "switchable bandwidths" is overly broad) (App. Br. 22-24; Reply Br. 6-7).

3. Appellants contend that the Examiner erred in rejecting claims 28-33 under 35 U.S.C. § 103(a) over the combination of Yan, DVB.org, and IEEE 802.11a Std (*see supra* third rejection) for numerous reasons, including: (1) Yan fails to teach or suggest the limitation of "a direct current (DC)-correction element configured to include switchable bandwidths," as recited in claim 28; (2) Yan's column 5 describes selecting a resistance as opposed to a bandwidth because a DC offset is direct current which has zero bandwidth (i.e., the Examiner's interpretation of "switchable bandwidths" is overly broad); and (3) Yan's column 6 describes operating a DC correction

control signal *when* the DC correction circuitry operates, not to switch the bandwidth of the DC-offset correcting elements (App. Br. 24-27; Reply Br. 6-7).

### *Issues on Appeal*

Did the Examiner err in rejecting claims 1-27 as being obvious because Yan fails to teach or suggest the limitations of (i) “selecting different filtering bandwidths and different DC-offset correcting bandwidths based on which system baseband signal is to be processed,” as recited in claim 1, (ii) “bandwidth-switchable DC-offset correction elements,” as recited in claim 11, or (iii) “means for selecting different filtering bandwidths and means for selecting different DC-offset correcting bandwidths based on which system baseband signal is to be processed,” as recited in claim 21?

Did the Examiner err in rejecting claims 28-33 as being obvious because Yan and Peterzell fail to teach or suggest the limitation of “a direct current (DC)-correction element configured to include switchable bandwidths,” as recited in claim 28?

### ANALYSIS

We agree with Appellants’ contentions specifically addressed *supra*.

With regard to the first rejection, *supra*, we agree with Appellants that Yan fails to teach or suggest selection of bandwidths or switchable bandwidth elements as recited in independent claims 1, 11, and 21.

With regard to the second and third rejections, *supra*, we agree with Appellants that neither Peterzell (*see* columns 13-14) nor Yan (*see* column 5) teaches or suggests the limitation of “a direct current (DC)-current

element configured to include switchable bandwidths,” as set forth in independent claim 28. We also agree with Appellants that “one of ordinary skill in the art would not, in view of the [S]pecification, interpret ‘switchable bandwidths’ as ‘the bandwidth of the DC-offset is switched or adjusted or changed from a current level to a new level’” (Reply Br. 7) (emphasis deleted).

### CONCLUSIONS

(1) Yan fails to teach or suggest the limitations of (i) “selecting different filtering bandwidths and different DC-offset correcting bandwidths based on which system baseband signal is to be processed,” as recited in claims 1-10, (ii) “bandwidth-switchable DC-offset correction elements,” as recited in claims 11-20, or (iii) “means for selecting different filtering bandwidths and means for selecting different DC-offset correcting bandwidths based on which system baseband signal is to be processed,” as recited in claims 21-27.

(2) Yan and Peterzell fail to teach or suggest the limitation of “a direct current (DC)-correction element configured to include switchable bandwidths,” as recited in claim 28-33.

(3) Appellants have established that the Examiner erred in rejecting claims 1-33 as being unpatentable under 35 U.S.C. § 103(a).

(4) Claims 1-33 have not been shown to be unpatentable.

Appeal 2009-013414  
Application 10/696,626

DECISION

The Examiner's rejections of claims 1-33 are reversed.

REVERSED

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